XP-002180908

AN - 1996-017135 [02]
AP - JP19940091801 19940428
CPY - TAMA-N
DC - B05 D16
FS - CPI
IC - A61K31/20 ; C07C57/12 ; C07C59/42 ; C12P7/42
MC - B10-C04D B14-H01B D05-A02A D05-H13
M2 - [01] H4 H401 H481 H7 H722 H8 J0 J011 J1 J171 M280 M316 M321 M331 M342 M381 M391 M416 M781 M903 M904 N134 P633 Q233; 9602-12201-U
PA - (TAMA-N) TAMANOI VINEGAR
PN - JP7291862 A 19951107 DW199602 A61K31/20 005pp
PR - JP19940091801 19940428
XA - C1996-005517
XIC - A61K-031/20 ; C07C-057/12 ; C07C-059/42 ; C12P-007/42
AB - J07291862 Agents contg. hydroxylinolic acid (HLA) (which is prepd. from linolic acid (LA) on action of a plant lipoxygenase) as active component is new. Also claimed is a method for preparing the antitumour agents which comprises reacting LA with a plant lipoxygenase, adjusting the pH of the reaction mixt., removing ppte. by filtration, extracting the filtrate, evaporating the extract in vacuo, applying the residue to normal phase silica gel column chromatography, precipitating the HLA fractions, and drying the ppte in vacuo.

- USE/ADVANTAGE - The antitumour agents may be administered orally as emulsion, tablets, powder, capsules, granules, syrup, suspension, liquid prepn. or sublingual prepn. or parenterally as injection (i.m., i.v., infusion), suppositories (rectal) or ointment. In in vitro tests, HLA specifically inhibits growth of tumour cells (e.g. murine, leukaemia P388: IC50 3.8 micro g/ml (cf. LA: 27.5 micro g/ml; murine Sarcoma-180: 3.8 (cf. LA;29.9); human nasal pharyngeal tumour KB: 12.4 (cf, LA: 266.0); SV40 transformed cell SV-fH: 1.4 (cf. LA: 29.9)) with no toxicity to normal cells. Waste material such as rice bran can be utilized as lipoxygenase source. HLA can be produced at low cost on a large scale. HLA means 18C straight chain fatty acids having one hydroxy and two double bonds (e.g. 9-hydroxy-10(E)-12(Z)-octadecadie noic acid; 13-hydroxy -9(Z)-11(E)-octadecadienoic acid). Hydroxylation of LA to HLA is achieved with a plant lipoxygenase which is produced by plant seeds or fruits, e.g. rice, potato, tomato, partic. rice bran, tomato peel. These may be used as such or from which lipoxygenase may be extracted with water.(Dwg.0/2)

CN - 9602-12201-U
IW - ANTITUMOUR AGENT PRODUCE CONTAIN HYDROXY LINOLEIC ACID ACTIVE COMPONENT
IKW - ANTITUMOUR AGENT PRODUCE CONTAIN HYDROXY LINOLEIC ACID ACTIVE COMPONEN
NC - 001
OPD - 1994-04-28
ORD - 1995-11-07
PAW - (TAMA-N) TAMANOI VINEGAR
TI - Antitumour agents and prodn. - c ntain hydroxy:linolic acid as activ component